# Facilities Closure and Demolition Project

## (a portion of Operable Unit 3)

**August 1997**

### For More Information

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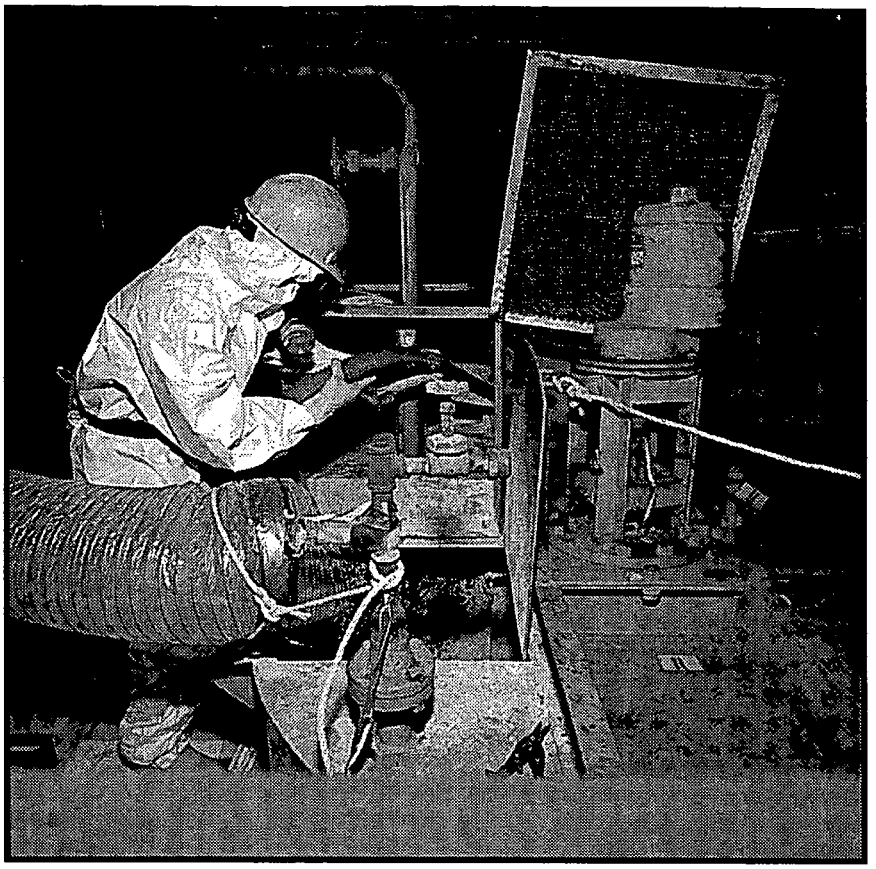
For specific questions about FC&DP activities, contact DOE-FEMP Operable Unit 3 Team Leader John Trygier, 513-648-3154; or e-mail John_Trygier@fernald.gov.



*A FEMP worker is vacuuming holdup material from a Lime Slurry Tank exhaust system. Safe Shutdown workers prepare buildings for decontamination and dismantling activities (6383-259).*

### Description

The Facilities Closure and Demolition Project (FC&DP) is responsible for the above-ground remediation of more than 200 former uranium processing facilities and equipment at the Fernald Environmental Management Project (FEMP).

When FEMP production ended in 1989, many production facilities, including process lines, drumming stations and equipment, still contained quantities of raw, intermediate and finished uranium products. The mission of FC&DP is to remove legacy nuclear materials currently stored in FEMP buildings, clean out the buildings and equipment, and decontaminate and dismantle (D&D) these facilities.

### Operable Unit 3 Regulatory Agreements

To accelerate the D&D of contaminated, deteriorating buildings and structures, DOE and the U.S. Environmental Protection Agency (EPA) signed the *Operable Unit 3 Record of Decision for Interim Remedial Action* on July 22, 1994. The interim action shortened the decision-making process by several years and saved taxpayers millions of dollars.

On Sept. 24, 1996, U.S. EPA and DOE signed the *Operable Unit 3 Record of Decision for Final Remedial Action*. This record of decision addresses treatment and final disposition of contaminated materials generated by D&D activities.

On June 11, 1997, U.S. EPA approved the *Operable Unit 3 Integrated Remedial Design/ Remedial Action Work Plan*, which details the methods and strategies used to safely D&D the buildings and the appropriate disposition of all resulting debris.

### Site-Wide Remedial Strategy

The regulatory agreements which drive FC&DP activities are consistent with the site-wide remedial strategy which involves balancing off-site disposal of highly contaminated wastes with on-property disposal of the higher volume, less-contaminated wastes.

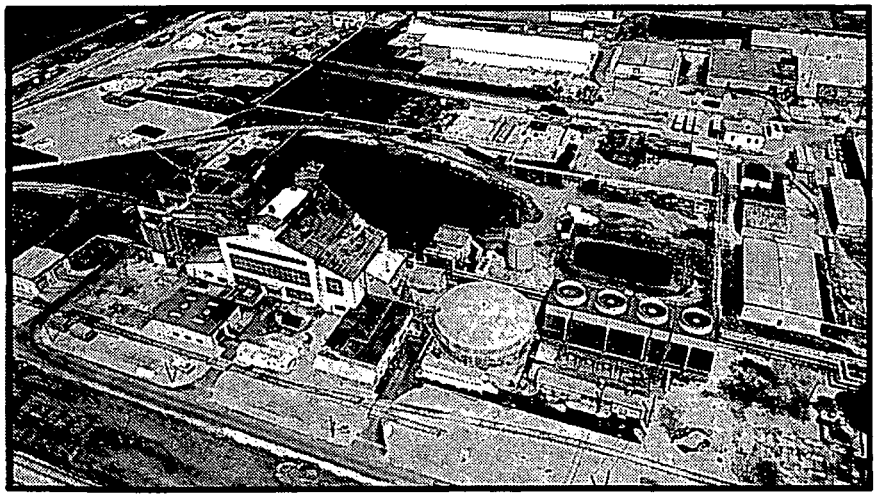
Building removal is planned to coincide with soil excavation in adjacent areas of the site to minimize the staging duration of materials prior to disposal and to avoid potential for contaminating clean areas. The strategy is to continually collapse and consolidate radiologically contaminated zones so they become smaller and fewer until only the On-Site Disposal Facility remains.

DOE and Fluor Daniel Fernald will routinely evaluate recycling options and new technologies to help minimize the contaminated material going into the On-Site Disposal Facility.

### Safe Shutdown (Removal Action 12)

This removal action involves removal and proper disposition of all nuclear product and in-process residue materials, excess supplies, chemicals, and associated process equipment that were abandoned when the FEMP ended production in 1989. This removal action also provides for isolating and de-energizing production-related equipment and utilities.

Safe Shutdown operations are currently on schedule in Plant 2/3, the former Ore Refinery Plant. Hazardous waste workers and craft personnel are in the process of removing holdup material (approximately 27,500 pounds as of July 30, 1997) and disconnecting utilities. Safe Shutdown personnel have completed roughly 63 percent of their work in Plant 2/3 and activities are expected to be finished by March 1998.



*Similar to the disposition of Plant 7, Plant 4, and Plant 1 materials, the bulk of Boiler Plant/Water Plant Complex D&D construction debris will be placed in interim storage on the building foundations prior to final disposition in the On-Site Disposal Facility (6385-187).*

To date, six major production plants have been safely shut down and isolated. The two facilities awaiting Safe Shutdown are Plant 6, the former Metal Fabrication Plant, and Plant 8, the former Recovery Plant.

### Decontamination and Dismantling Activities

FEMP D&D projects completed include: Plant 7; the Plant 1 Ore Silos; the Fire Training Facility; the Hydrofluoric Acid Tank Car; the Nitric Acid Tank Car; Plant 4; the High and Low Nitrate Tanks; and the Plant 1 (Phase I) Complex. The D&D projects that are planned for the remainder of 1997 and 1998 are discussed below and are highlighted on the site photo (next page).

#### *Boiler Plant/Water Plant Complex*

On Feb. 27, 1997, Fluor Daniel Fernald awarded the Boiler Plant/ Water Plant Complex D&D project to Foster Wheeler Environmental Corp. of Livingston, N.J. Under its 18-month, firm-fixed price subcontract (approximately $4 million), Foster Wheeler will D&D the Boiler Plant/Water Plant structures and segregate, cut, and containerize the D&D construction debris. Currently, Foster Wheeler is working on asbestos abatement, including transite removal. Other near-term activities include the start of equipment disassembly in the Boiler Plant and demolition of the Water Plant, fly ash silo, and precipitators.

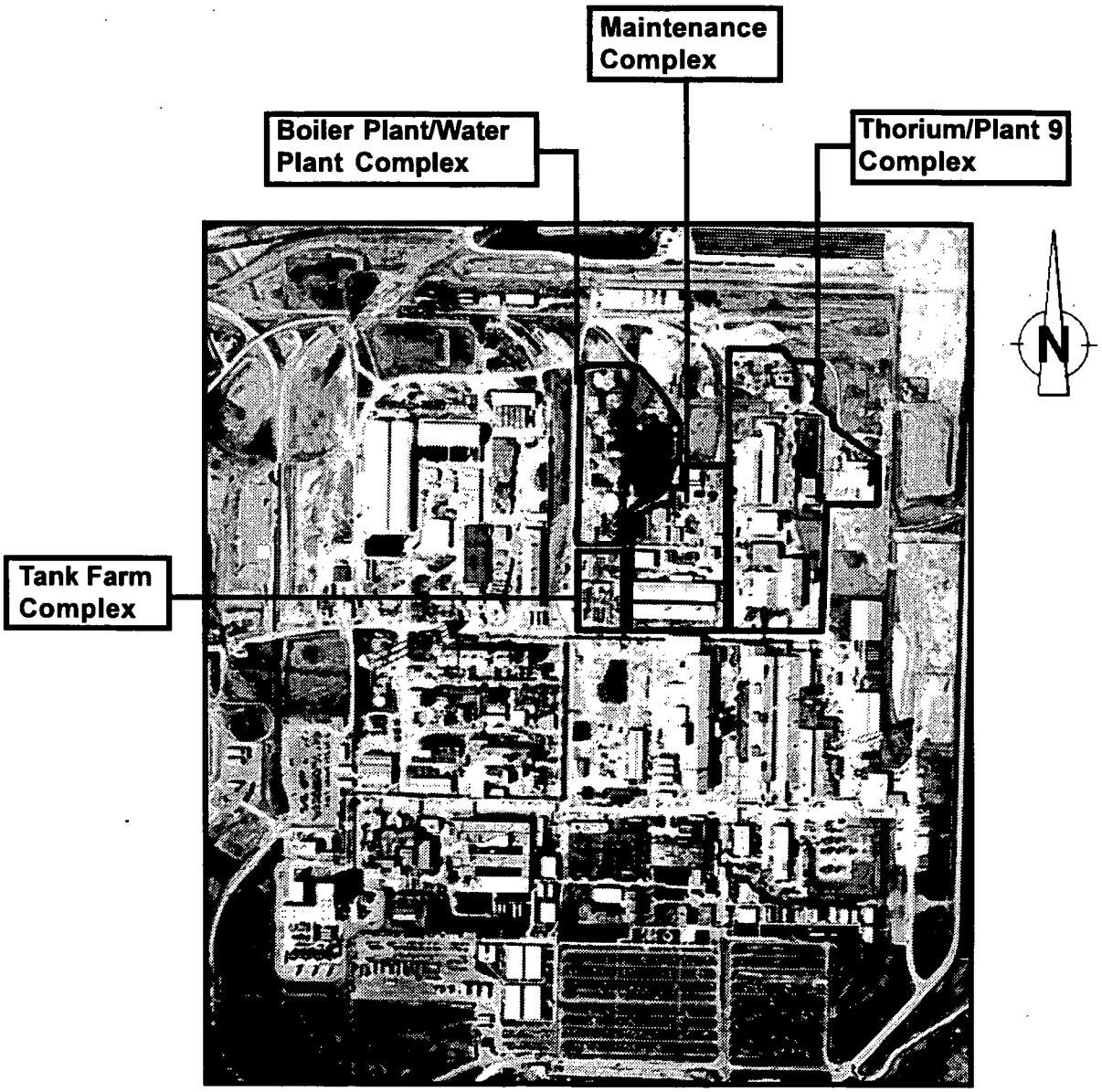
***Thorium/Plant 9 Complex***

U.S. EPA approved the Thorium/Plant 9 Complex Implementation Plan in August 1997. Fluor Daniel Fernald is on schedule to award the D&D subcontract, with DOE's approval, in September 1997. The selected subcontractor is currently scheduled to begin mobilizing in October 1997.

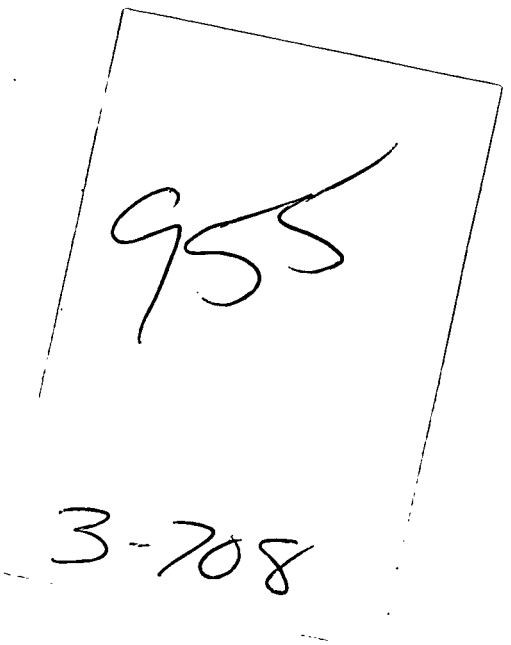
***Future Projects***

Following the Thorium/Plant 9 Complex D&D, the Tank Farm Complex and the Maintenance Complex D&D will begin. Due to their close proximity to each other, Fluor Daniel Fernald began designing these complexes as a single, integrated project to save time and money.

DOE anticipates submitting the Maintenance/Tank Farm Complex Implementation Plan to U.S. EPA by March 1998.




*D&D activities are heavily focused in the northeast corner of the FEMP's former Production Area to allow for the timely excavation of the contaminated soils beneath those buildings (4713).*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